BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK : BALANCE WORKS TO SAMUDHAYA BHAVANA IN WARD NO.2

Agency	**Sri. K.Gopireddy, #3, 1st Main, Ramachandrappa layout, Veerana Palya, Arabic College Post, Bangalore-560045**

EIRL RATE ANALYSIS

Estimate Amount:-	**80 Lakhs**
Approved Amount	**7562790.000**
Name of Contractor:-	**Sri. K.Gopireddy**

Sl No	Description.	Unit	Page	Item	Basic rate	Lift charges	Total	AW @ 8%	Total Rate	Add T.P (+)4.99%	Final Rate.
1	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the exavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications.	Cum	.Pg 06 KPWD S.R 2018-19	2.4	449.00	-	449.00	35.92	484.92	24.20	509.12
2	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications.	Cum	.Pg 07 KPWD S.R 2018-19	2.15	2429.00	-	2429.00	194.32	2623.32	130.90	2754.22
3	Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.	Cum	.Pg 13 KPWD S.R 2018-19	4.3	5102.00	-	5102.00	408.16	5510.16	274.96	5785.12
4	Providing and laying in position plain cement concrete of mix M15 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation,plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications	Cum	.Pg 13 KPWD S.R 2018-19	4.6	5422.00	-	5422.00	433.76	5855.76	292.20	6147.96

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5	Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.64cum and fine aggregtes @ 0.43cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation,plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.	Cum	.Pg 12 KPWD S.R 2018-19	4.5	5328.00	-	5328.00	426.24	5754.24	287.14	6041.38
7	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications.	Cum	.Pg 07 KPWD S.R 2018-19	2.1	201.00	-	201.00	16.08	217.08	10.83	227.91
8	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specificaitons	Sqm	.Pg 16 KPWD S.R 2018-19	4.28	258.00	-	258.00	20.64	278.64	13.90	292.54
9	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for columns, pillars,post and struts, circular or curved in plan including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 Pg No 16, Item No 4.33	Sqm	.Pg 16 KPWD S.R 2018-19	4.33	913.00	-	913.00	73.04	986.04	49.20	1035.24
10	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specificaiton.	Sqm	.Pg 16 KPWD S.R 2018-19	4.29.2	400.00	-	400.00	32	432.00	21.56	453.56
11	Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floor including cost of all materials, labour complete as per specifications.	Sqm	.Pg 17 KPWD S.R 2018-19	4.36	755.00	-	755.00	60.4	815.40	40.69	856.09

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14	KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregtes @ 0.47cum, with superplastisiser @3lts confirming to IS 9103-1999 Reaffirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation plinth and First Floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications.	Cum	.Pg 14 KPWD S.R 2018-19	4.1	5812.00	-	5812.00	464.96	6276.96	313.22	6590.18
15	KSRB 4.2.8 : Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum andfine aggregtes @ 0.47cum,with superplastisiser @3lts confirming to IS 9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick,vibrated fo all works in ground Floor level for roof slabs ,staircase, lintels , beams, retaining walls ,return wall, walls (an thivck ness) including attached plasters ,columns, pillars,posts,struts.butters,string or lacing courses ,parapets,coping,bed blocks,anchor blocks ,plain window cills,fillets including cost of all materials, labour,HOM of machinery, curing, complete as per specifications.	Sqm	.Pg 14 KPWD S.R 2018-19	4.12	6045.00	-	6045.00	483.6	6528.60	325.78	6854.38
18	Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.	Sqm	.Pg 18 KPWD S.R 2018-19	4.46.2	64410.00	-	64410.00	5152.8	69562.8	3471.18	73033.98

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27	Providing rough cement plastering 15mm thick(rough plastring) in single coat with cement mortar 1:4 to brick masonry for base of dadooing works with sand of approved quality, providing and removing scaffolding, inclding cost of materials, labour, curing complete as per specifications ,	Sqm	.Pg 117 KPWD S.R 2018-19	15.3	205.00	12	217.00	17.36	234.36	11.69	246.05
31	Providing and applying painting in two coats with plastic emulsion paint of approved brand on wall surface to give an even approved shade after thoroughly brushing the surface, free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications.	Sqm	.Pg 119 KPWD S.R 2018-19	15.51.2	90.00	-	90.00	7.2	97.20	4.85	102.05
32	Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications.	Sqm	.Pg 120 KPWD S.R 2018-19	15.53.2	102.00	-	102.00	8.16	110.16	5.50	115.66
33	Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications.	Sqm	.Pg 120 KPWD S.R 2018-19	15.53.2	102.00	8	110.00	8.8	118.80	5.93	124.73
34	Providing and laying M-15 cement concrete flooring, 50 mm thick with metallic concrete hardner topping , under layer of 35mm thick m-15 cement concrete using broken granite metal of 20mm and down size, and top layer 50mm thick of metallic cement hardner consisting of mix 1:2 (1 cement hardner mix : 2 granite metal 10mm nominal size) by volume, with which metallic hardening compound of approved quality mix in the ratio of 4:1 (4 part of cement and 1 part of metallic floor hardening compound of approved quality by wt) , including finishing cost of materials, labour, curing, complete as per specifications	Sqm	.Pg 104 KPWD S.R 2018-19	14.13	631.00	4	635.00	50.8	685.80	34.22	720.02

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36	Providing Ceramic tiles of size 30x30cms 6mm thick of approved make ,shade and size for flooring, treads of steps and landings laid on a bed of 12mm thick, cement mortar 1:3 mix, flush pointing with white cement using colour pigment , including cost of materials, labour, curing, complete as per specifications.	Sqm	.Pg 108 KPWD S.R 2018-19	14.36.2	1210.00	4	1214.00	97.12	1311.12	65.42	1376.54
45	ISOPROOF SEALER Providing waterproof treatment to roof slab using 2 coats of acrylic co polymer elastomeric ISOPROOF sealer & protector. The surface shall be prepared free of tar, dust, fungus, loose particles etc.,The surface shall be applied with basecoat of crystallization liquid and then ISOPROOF, wetting agent and liquid (1:1:6) over the prepared surface. In addition the surface shall be provided with polysulphide/ acrylic sealant to V groves, making haunch at junction of parapet and roof slab and at damaged portion using patching mortar to drain off rain water. Over this one coat of flexible cementatious membrane (FCM), Spreading 2 layers of 40 gsm non woven geotextile membrane as reinforcing material (over FCM) with one primer coat of ISOPROOF & applying second coat of ISOPROOF liquid over the primer coat - conforming to ASTM D 412 - 1992. The work shall be carried out as per the directions of the Engineer in charge	sqm	.Pg 275 KPWD S.R 2018-19	38.3	980.00	-	980.00	78.4	1058.40	52.81	1111.21
49	Conveying the excavated earth, debries etc., with all lead and lifts including loading and unloading charges etc., complete as per the direction of the Engineer-in-charge.	Cum	.Pg 136 KPWD S.R 2018-19	17.1	62.12	-	62.12	4.9696	67.09	3.35	70.44

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49	Providing and fixing M.S. Gate as per Chief Architect Drawing,using 50mm x 50mm 14 guage M.S. hollow pipe frame work bent to ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c in two halves and 40mmx6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members as shown in the drawing etc., complete. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specifiocation.	Sqm	.Pg 45 KPWD S.R 2018-19	7.37	3012.00	-	3012.00	240.96	3252.96	162.32	3415.28
53	Providing flooring with 20mm thick polished Cadapa slabs using cement mortar 1:6, 25mm thick over existing cement concrete bed or top of roof laid to line and level and jointed with cement slurry mixed with pigment to match the shade of the slab, including cost of materials, labour, curing, polishing complete as per specifications.	Sqm	.Pg 105 KPWD S.R 2018-19	14.17	1288.00	-	1288.00	103.04	1391.04	69.41	1460.45

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E2	Stone cleaning using biodegradable liquid solution The granite stone surface to be cleaned by means of coconut wire brush and dry cloth and there after apply safe N easy/Equivalent Bio-degradeable liquid solution on the cleaned surface with Nilon brush or sponge to an extent, towards upwards from the bottom, approximate 1 liter covers 10 Sqmtr and let the soaked surface react with the applied chemical, the depositis of dust , dirt and other material depositis on the surface and finally to be cleaned after two hours of application. connect a water pipe with water source to wash with pressure of 130ps per seccound on the safe nN easy/equivalent bio- degradable liquid solution applied surface, untill the deposit of dirt, hydro corbon soils and alge from the surface and pores of the substrate is completely removed. The principal properties of the stone is to be retained without any slightest pitting on the surface to dry from the natural environment fopr a day or 24hrs. the process should include all chemical materials, labour application, tools, high pressure water jet machine, safety procedures like hand gloves, helmet, safety belt gum boots, scaffolding, transportation etc., as per the instructions of the engineer-in-charge of the work. The Bio-degradable liquid solution should be ammonium hydrogendifloride solution and be approved by OSHA(The occupational safety & Health administration) as user friendly, substracte friendly and environmental friendly & sara III section 313 Standardes	Sqm	.Pg 303 KPWD S.R 2018-19	38.33.1	364.00	-	364.00	29.12	393.12	19.62	412.74

Contractor

Assistant Engineer 22/10/2020

Assistant Executive Engineer

Executive Engineer

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ಯಲಹಂಕ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ